# A LIST OF THE REPTILES AND BATRACHIANS COLLECTED BY DR. RAGAZZI IN SHOA AND ERITREA BY G. A. BOULENGER, F. R. S.

The large collection of *Reptiles* and *Batrachians* made by Dr. V. Ragazzi, for several years director of the Italian Station at Let Marefia, Shoa, and presented by him to the Genoa Museum has been entrusted to me for study by the Marquis G. Doria and Dr. Gestro. I have given a list of the species represented in the collection, with such notes as I have thought might be of interest, and with the descriptions of two new species. I am indebted to Dr. Gestro for information on the more obscure localities where Dr. Ragazzi's collections were made; a list of the localities follows:—

#### ERITREA.

Abdur (Mt.), Buri Peninsula, S. E. of Massowa.

Alali, 13 miles N. of Assab.

Assab.

Beilul, near Assab.

Bizen (Mt.), S. of Ghinda, E. of Asmara

Dahlac Island.

Digdigta Mts., between Saati and Sabarguma.

Dissei Island, S. E. of Massowa.

Emberemi, N. W. of Massowa.

Ghinda, between Massowa and Asmara.

Mai Maracat, N. E. of Saganeiti, Ocule-Cusai Region.

Mareb R. (Upper), Affluent of Atbara R.

Massowa.

Moncullo, near Massowa.

Neberet, Rapid flowing into the Langheb R., trib. of the Baraca R. Nocra Island, N. of Dahlac Island.

Otumlo, near Massowa. Ras Corali, Buri Peninsula. Saati, 18 miles inland of Massowa. Sabarguma, between Saati and Ghinda.

SHOA

Alio Amba, S. E. of Ancober. Farré, N. E. of Ancober. Let Marefia, near Ancober. Mahal Uonz, one mile S. E. of Ancober. Rappé, near Antoto.

GALLALAND.

Harar.

Since the publication of the works of Rüppell and Blanford, little has appeared on the herpetology of Abyssinia. In 1886, Parenti and Picaglia (Atti Soc. Nat. Modena [3] V) recorded some Reptiles obtained by Dr. Ragazzi on the littoral of the Red Sea, and in 1888, Prof. Giglioli made up a list of a few Reptiles (Agama atricollis, Smith, Hemidactylus verruculatus, Cuv. = turcicus, L., Mabuia striata, Ptrs., Boodon lemniscatus, D. & B.) from Shoa and Assab, collected by Count Boutourline and Dr. Traversi, which appeared in these Annali' (Ser. 2, vol. VI, 1888, p. 65). In the Annals and Magazine of Natural History for 1890, I placed on record a new variety of Chalcides ocellatus discovered at Assab by Dr. Ragazzi, and in the Proceedings of the Zoological Society for 1894 I described a new Frog (Cassina obscura) from Shoa, also from Dr. Ragazzi's collections.

# REPTILIA.

#### Chelonia.

- 1. Testudo pardalis, Bell. Shoa.
- 2. Pelomedusa galeata, Schoepff. Sabarguma.

#### Lacertilia.

3. Pristurus flavipunctatus, Rüpp. — Not rare near Assab. where it is found on the trunks of Acacias.

Specimens from the following localities are preserved in the British Museum: Massowa (Rüppell); Keren, Bogos (Antinori); Soudan (Ori); Zaila, Somaliland (Nurse); Aden (Doria, Yerbury).

4. Pristurus percristatus, sp. n. - Snout obtusely pointed, longer than the distance between the eye and the ear-opening, once and one third to once and a half the diameter of the orbit; forehead very slightly concave; ear-opening oval, oblique, one fourth to one third the diameter of the orbit. The hind limb laid forwards reaches the shoulder in females, between the shoulder and the ear in males, nearly to the ear in young specimens. Head and body covered with uniform granular scales, which are much larger and of about equal size on the snout and belly. Rostral more than twice as broad as deep, with median cleft above; nostril pierced between the rostral and two or three nasals; upper nasal largest, in contact with its fellow or separated from it by granules; six to eight upper and four to six lower labials; symphysial very large, angular or truncate posteriorly and in contact with two or three enlarged mental granules; no regular chin-shields. Tail compressed, longer than head and body, tapering to a fine point; in the males, the tail is strongly compressed and crested above, the crest being formed of closely-set, lanceolate lobes and continued all along the back to the nape; the lower edge of the tail is also crested, but less strongly and less regularly (1); in the females, the crest is less developed, although perfectly distinct, on the upper edge of the tail and it is absent on the body or continued as a mere series of enlarged granules. Greyish or brownish above, with small dark brown spots or narrow cross-bars on the spine; sides usually speckled or lineolated with orange or brick-red; females and young often with a yellow or orange vertebral stripe; a dark streak on each side of the head, passing through the eye; males with a black, light-edged spot, often ocellar-like, on the

<sup>(!)</sup> The crest is well developed on regenerated tails; on bifid reproduced tails, both branches are crested. On second regeneration, the crest, I have ascertained, is absent, and this accounts for the differences in the tails of *P. carteri* and colars, according to their being secondary or tertiary.

shoulder, sometimes accompanied by other dark and light variegations; whitish beneath, throat often speckled with brown, belly sometimes with red dots.

				3		9	
Total length				87	millim.	86	millim
Head				14	))	10	))
Width of he	ad			6.5	»	6	))
Body				24	>>	25	))
Fore limb .				16	>>	15	>>
Hind limb .				21	))	19	>>
Tail				52	,))	51	))

Ghinda; Neberet Valley; Emberemi.

This species is closely related to *P. flavipunctatus*, from which males are easily distinguished by the strongly developed dorsal crest. Having examined a very large material, 294 specimens of this new species, and a good number of *P. flavipunctatus*, I am well satisfied as to the validity of the distinction now drawn.

Seven species of Pristurus appear to be distinguishable: —

I. Rostral shield bordering the nostril.

A. Tail crested.

Crest, in the male, very strong on the back,
extending to the nape; hind limb reaching
the shoulder or between the shoulder and
the ear . . . . . . . . . . . . . 1. percristatus, Blgr.
Crest feeble on the back, if distinct, and not
extending on the anterior half of the body;
hind limb reaching the axilla or the shoulder
in the adult . . . . . . . . 2. flavipunctatus, Rüpp.
Crest not extending on the body; hind limb
reaching the ear-opening or between the
shoulder and the ear-opening . . . 3. rupestris, Blanf.
B. Tail not crested . . . . . . . 4. insignis, Blanf.
II. Rostral not bordering the nostril.
Snout obtuse; tail not crested . . . . 5. crucifer, Val.

Snout obtuse; tail crested above . . . 6. phillipsii, Blgr.

Snout pointed; tail (when intact) crested

I am disposed to regard, provisionally, *P. collaris* (Stdr.) And. as a variety of *P. carteri*. The snout is usually, but not constantly, shorter, and a black band is present across the throat, though, rarely, very indistinct. The types of *P. carteri* have the granules on the middle line of the belly raised and conical, which is not the case in any of the specimens referred by Dr. Anderson to *P. collaris*; but the fact that a similar development of the ventral scales takes place in some specimens of *P. flavipunctatus* (from Aden) and not in others, shows this character to be one of very doubtful importance for diagnostic purposes.

5. Ptyodactylus lobatus. — 2 specimens from Alali, and 49 from Ghinda. This extensive material supports the view I have previously taken as to the supposed species of this genus (1).

None of the specimens attain the extreme slender form of some of the Egyptians; in size and proportions they mostly approach the large and stout specimens known from Syria; but the variations, both in scaling and proportions, are considerable, and the tail assumes various forms according to its condition, whether intact or reproduced. I have tabulated the characters of a few specimens from Ghinda for the purpose of comparison with the indications given by me in 1891 (Trans. Zool. Soc. XIII, pp. 112-114).

	8	3	8	Ŷ	Ç	Ç	
From snout to vent	95	75	54	78	60	52	millim.
Head	27	23	17	22	18	16	>>
Fore limb	37	31	22	32	26	21	>>
Hind limb	50	42	32	41	35	28	>>
Upper Labials	13-14	12-13	13	13	11-12	13-14	»
Lower labials	11-12	13	12	13	11	11-12	>>

The largest specimen previously recorded (from Jerusalem) measures 84 millim, from snout to vent. It will be noticed that the proportions tabulated in the last column agree very closely

<sup>(1)</sup> I need hardly point out that the numerous Syrian species described by Boutan are founded upon merely individual variations, and cannot be accepted even as constant varieties.

with those of Algerian specimens (P. oudrii, Lat.). When the limbs are stretched forwards, the wrist reaches the anterior border of the eye, or between the eye and the nostril, the extremity of the hind limb the axil or the shoulder. The granulation of the back is coarse and the nasal region not or but moderately swollen.

The coloration varies. Some specimens are of a uniform dark grey-brown; others are pale grey, with or without darker and lighter spots; whilst further specimens are handsomely marbled with dark brown or reddish brown, the tail marked with regular dark bars.

6. Hemidactylus mahouia, Mor. — A single specimen from Harar, collected by Count Salimbeni, is referred with some doubt to this species, the head being crushed and the tail missing. Femoro-praeanal pores 13-14.

The British Museum has specimens from the following African localities: Somaliland (Paris Mus.); Ngatana (Gregory); Mombasa, Lamu (Jackson); Taita (Wray); Zanzibar (Kirk); Shiré Valley, Zomba (Johnston), Delagoa Bay (Mrs. Monteiro); Carangigo, Angola (Welwitsch); Lower Congo (Linden); and Lagos (Millson).

7. Hemidactylus turcicus, L. — Assab. "Very common in dwellings."

Specimens from Jask, Persia, presented to the British Museum by Messrs. Ifinch and Butcher show the Lizard described and figured by Blanford (Zool. E. Pers.) as *Hemidactytus*, sp., to belong to this species.

- 8. Hemidactylus coctaei, D. & B. Ghinda.
- 9. Tarentola annularis, Geoffr. Dahlac Island, Noera Island, Ras Corali, Ghinda.
  - 10. Agama spinosa, Gray. Shoa, Ghinda.
- 11. Agama cyanogaster, Rüpp. Let Marefia, Farré, Mahal Uonz, Alio Amba.

This species appears to pass completely into A. atricollis, Smith, and the two may have to be united.

12. Varanus ocellatus, Rüpp. — Digdigta Mountains.

- 13. Latastia longicaudata, Reuss. An adult male from Shoa, and a young from Dissei Island. The adult has 57 scales across the middle of the body, the ventrals in 6 rows, and 10 femoral pores on each side. In the young I count 53 scales, 6 rows of ventrals, and 13 femoral pores.
  - 14. Latastia spinalis, Ptrs. Ghinda. 59 specimens.

Interparietal shield usually absent; if present, separated from the occipital. Collar formed of 7 to 10 shields. 30 to 40 scales across the middle of the body, the enlarged dorsals forming two to six more or less regular longitudinal series. 11 to 15 femoral pores on each side. Young with seven blackish-brown stripes separated by white lines, tail of a beautiful coral red. Adult yellowish or pale brown, the dark stripes usually persisting in the females, disappearing in the males or replaced by longitudinal series of black spots.

- 15. Acanthodactylus boskianus, Daud. Dahlac Island.
- 16. Eremias mucronata, Blanf. Assab, Beilul.
- 17. Eremias guttulata, Licht. Massowa.
- 18. Mabuia brevicollis, Wiegm. Ghinda. 5 specimens.

All have two loreals. Scales in 30 or 32 rows. Young dark brown with longitudinal and transverse series of large, round, cream-coloured spots. These spots become gradually smaller with age, and in half-grown specimens are intermixed with black spots, the ground colour being a pale brown.

- 19. Mabuia septemtaeniata, Reuss. Ghinda, Saati.
- 20. Mabuia megalura, Ptrs. Let Marefia. 4 specimens.

Scales in 26 or 28 rows. Back uniform or with two or four black longitudinal lines.

- 21. Mahuia quinquetaeniata, Licht. Shoa, Ghinda.
- 22. Mabuia isselii, Ptrs. Ghinda.
- 23. Mabuia striata, Ptrs. Let Marefia.

Has been recorded from Shoa and Gallaland:

24. Chalcides ocellatus, Forsk. — Saati, Dahlac Island, Mareb, Ghinda, Mt. Abdur, Assab.

The 8 specimens from Saati belong to the typical form, ocellated all over and without light lateral stripe. The largest spe-

cimen measures 122 millim. from snout to vent. 5 have 28 scales round the body, 3 have 30.

The specimens from Dahlac Island (2), Mareb (1) and Ghinda (5) agree with the var. ragazzii in the small size, the largest measuring only 96 millim. from snout to vent. The ocellated spots, although present all over the back, are small and feebly marked and a light stripe extends along each side, the whole coloration being much as in C. mionecton. The specimens from Dahlac Island have both 26 scales round the body, and the same number is found on the Mareb and Mt. Abdur specimens; one of the Ghinda specimens has also 26 scales, the four other having 28. This form may be distinguished as a variety, intermediate between the typical form and the var. ragazzii, for which I propose the name humilis. The specimen from Assab is interesting as being a second example of the var. ragazzii, which I established in 1890 upon a single specimen from the same locality; it agrees entirely with the type in the coloration and the number of scales (24), and measures 75 millim. from snout to vent.

#### Rhiptoglossa.

- 25. Chamaeleon basiliscus, Cope. Ghinda. Numerous specimens.
- 26. Chamaeleon affinis, Gray. Let Marefia. 6 specimens. Harrar. 1 specimen.

The enlarged tubercles on the vertebral line form a feeble, denticulate dorsal crest.

## Ophidia.

27. Typhlops blanfordii, Blgr. — Ghinda.

The single specimen agrees in every respect with the type, from Senafe, Abyssinia, except for the absence of a light streak along the belly.

- 28. Eryx thebaicus, Reuss. Plains of Otumlo, Moncullo and Saati.
- 29. Boodon lemniscatus, D. &. B. Let Marefia. Several specimens.

Scales in 25 rows. Ventrals 199-200; subcaudals 48-67.

- 30. Boodon lineatus, D. & B. Mareb, Ghinda.
- 31. Lycophidium abyssinicum, Blgr. Ghinda.

A single specimen, with 204 ventrals and 33 subcaudals.

32. Zamenis rhodorhachis, Jan. — Assab.

Ventrals 215; subcaudals 122.

33. Zamenis smithii, Blgr. — Assab. A single young specimen. Scales in 23 rows; ventrals 187; subcaudals 92. Grey above, with alternating dark transverse spots; sides with two alternating series of small black spots; a series of black dots along each side of the belly. An adult ♀ without locality (Eritrea or Shoa) has the scales in 21 rows, 192 ventrals, and 92 subcaudals.

34. Chlorophis neglectus, Ptrs. — Let Marefia. A single specimen.

Ventrals 170; subcaudals 115.

35. Scaphiophis albopunctatus, Ptrs. — Rappé.

A large specimen, measuring 1260 millim. (tail 240). 32 scales across the neck, 27 across the middle of the body. Uniform pale reddish-brown.

36. Dasypeltis scabra, L. — Shoa. Three specimens.

Scales in 22 or 23 rows. Ventrals 217, 212, 216; subcaudals 56, 58, 45. Black above, dark grey or blackish beneath, chin and throat whitish.

37. Tarbophis obtusus, Reuss. — Saati. A single specimen.

Ten upper labials, fourth, fifth, and sixth entering the eye. Scales in 23 rows. Ventrals 278; anal divided; subcaudals 86.

- 38. Psammophis schokari, Forsk. Saati. A single specimen (V. 460; C. 96).
- 39. Psammophis punctulatus, D. & B. Saati. A single specimen (V. 189; C. 161).
- 40. Psammophis sibilans, L. Ghinda. A single specimen (V. 165; C. 111). Nine upper labials on the left side, fifth and sixth entering the eye.
- 41. Psammophis biseriatus, Ptrs. Beilul. A single young specimen (V. 152; A. 2; C. 111).
- 42. Dispholidus typus, Smith. Mai Maracat. A single specimen of the var. viridis, Smith. Sc. 21; V. 186; C. 121.

43. Aparallactus lunulatus, Ptrs. — Let Marefia.

A single specimen, uniform olive-grey above and beneath. V. 440; C. 58.

44. Echis carinatus, Schn. - Saati, Ghinda, Beilul.

Sc. 29-32; V. 167-191; C. 29-41.

45. Atractaspis irregularis, Reinh. — Eastern slope of Mt. Bizen.

Agrees in every respect with typical specimens, except in having the scales in 21 rows only. Ventrals 252; subcaudals 28 pairs.

### BATRACHIA.

- 1. Rana mascareniensis, D. & B. Shoa, Saati.
- 2. Rana delalandii, D. & B. Neberet Valley.
- 3. Cassina obscura, Blgr. Let Marefia.
- 4. Hylambates ragazzii, sp. n. Closely allied to *H. maculatus*, A. Dum., with which it agrees in the vomerine dentition, the size of the tympanum, the half-webbed toes, the small metatarsal tubercle and the proportions (the tibio-tarsal articulation reaching the tympanum); distinguished by the presence of a short but very distinct web at the base of the fingers, the skin of the upper parts covered with small round tubercles, and by the coloration. Uniform dark olive above; a fine white line from the tip of the snout to above the tympanum, following the canthus rostralis and the supraciliary edge; flanks, belly, hinder side of thighs, and lower surface of limbs dark purplish white, with small whitish spots and dots. From snout to vent 43 millim.

A single female specimen from Shoa.

- 5. Bufo regularis, Reuss. Saati, Ghinda.
- 6. Bufo blanfordii, Blgr. Saati, Dahlac Island.

The largest specimen measures 60 millim. from snout to vent.